CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

FINAL ORDER NO. 98-055
NPDES PERMIT NO. CA0036277

WASTE DISCHARGE REQUIREMENT FOR:

MR. DOUG HAYES, dba
PACIFIC OFFSHORE FARMS
PILLAR POINT HARBOR
HALF MOON BAY, SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. Mr. Doug Hayes doing business as Pacific Offshore Farms (hereinafter called the discharger) has applied for issuance of waste discharge requirements under the National Pollutant Discharge Elimination System.

FACILITY DESCRIPTION

2. The site is located in Pillar Point Harbor in western San Mateo County, California. The San Mateo County Harbor District (SMCHD) has set aside a lease area of about 500 yards by 700 yards in the northwest corner of Pillar Point Harbor for abalone aquaculture operations (Figure 1).

3. The discharger plans to grow red abalone in the waters of Pillar Point Harbor. Abalone will be raised in rearing cages, suspended beneath rafts, and anchored to the bottom by cement drums. Storage facilities have been proposed to be located on top of the rafts which may be used for cages, equipment and tools, and sorting of abalone.

4. In addition to the discharger, three other aquaculture operations are planned within the lease area. Based upon planning considerations, the SMCHD will require a minimum of a 300 foot buffer between each operation.

5. The waste "discharge" from abalone operations consists of the out-planting of abalone into the harbor, their food, and waste products which constitute an additional biochemical oxygen demand in the harbor which results from abalone respiration and decomposition of their waste products. In addition to the discharger, three other aquaculture operations are planned within the lease area.

DESCRIPTION OF OPERATIONS

6. The discharger has projected that it may grow as many as 500,000 abalone in Pillar Point Harbor. This number represents about 22 percent of the total number of abalone (2,250,000) projected to be grown, collectively, by four businesses which have proposed abalone aquaculture operations[1]. The 2,250,000 abalone production level is significantly lower than an earlier estimate of about 5,200,000 abalone which were projected to be grown (San Mateo County Harbor District, Mitigated Negative Declaration, 1996). Based upon the earlier production estimate (5,200,000), a simple model of abalone dissolved oxygen (DO) uptake versus DO availability in the harbor was prepared. That model suggested that 5,200,000 abalone had the potential to "severely impact dissolved oxygen levels in the harbor with resultant negative impacts to the biota" (San Mateo County Harbor District, Mitigated Negative Declaration, 1996). Although about a 55 percent decrease in abalone production (2.25 million versus 5.20 million) reduces the level of concern regarding the potential for dissolved oxygen depletion, some concern still remains.

7. Therefore this permit requires phased growth in abalone aquaculture operations with a water quality monitoring program as was originally recommended in the CEQA study in order to reduce potential impacts to water quality to a less than significant level (San Mateo County Harbor District, Mitigated Negative Declaration, 1996). Water quality monitoring will include physical and chemical attributes, and benthic invertebrate sampling. Monitoring requirements are described in the attached self-monitoring program. Assuming no significant adverse impacts, phased growth in animal units may occur per rates and requirements specified below in provision C.1.

8. Abalone in the proposed facilities will be fed kelp collected under a harvesting license issued by the California Department of Fish and Game (CDFG). According to CDFG, local kelp resources offshore of San Mateo County are minimal in their extent. Therefore there are legitimate concerns that local kelp resources could be adversely impacted if fully utilized by these proposed aquaculture operations. In addition, much larger kelp beds located offshore of Santa Cruz and Monterey Bay may not necessarily be viable options to the growers because current permitted harvesting reaches allowable limits in some winter months, and because of concerns expressed by various local interest groups regarding harvesting from these beds (e.g., the prime area for kelp harvesting in Monterey Bay is being proposed as an underwater park).

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[1] Abalone production figures refer to "maximum production levels" at the end of NPDES permit period in June of 2003. One abalone business which has been growing abalone in the harbor for several years, US Abalone, Inc., has stated that it will cease operations in Pillar Point Harbor by December 31, 1998.

9. The potential for non-intentional introduction of the sabellid worm into the marine environment from out-planting of abalone seed stock infested with sabellid worm is recognized as a significant ecological issue. The sabellid worm is a non-native pest species that causes deformation of abalone shells resulting in slow growth and potential mortality. The CDFG is the lead state agency responsible for regulation of sabellid worm issues. Policies and procedures for eliminating the potential spread of this nuisance species into wild abalone stocks are currently being developed by CDFG under the guidance of its Aquaculture Team. These policies and procedures, once formulated and approved, must be adhered to rigorously by the dischargers to: a) ensure that sabellid-free abalone stock are used in the out-planting of these facilities; and b) prevent the spread of sabellid worms into the natural environment.

10. Monitoring of benthic fish populations was originally recommended as part of the Mitigated Negative Declaration for the project (San Mateo County Harbor District, 1996), and in earlier draft versions of this permit. Based upon review of comments received from CDFG, Coastal Commission, and NOAA, it appears that intensive monitoring of dissolved oxygen concentrations, benthic infauna, and bottom sediment will provide a suitable index of how the proposed facilities may effect benthic fish communities residing in the harbor. Also, because benthic fish species assemblage and populations vary greatly under existing conditions, it would probably be very difficult to detect statistically significant changes in populations which could be attributed to the aquaculture facilities. Therefore fish population monitoring is not required as part of this permit.

11. Several waterfowl species (loons, cormorants, scaup, scooters, mergansers, grebes, etc.) use the harbor to feed and rest (Sequoia Audubon Society, 1995). Nearly all of these species require space to taxi and take-off into the air. Proposed facilities will cause a reduction in the available habitat area for waterfowl. However, the size of proposed facilities has been significantly reduced in comparison to the original proposal, all facilities are located nearby to one another, and growth in abalone production will occur at a gradual rate. Therefore, it does not appear that a significant reduction in waterfowl habitat area will occur as a result of aquaculture operations within the permit period (1998-2003), and hence, no bird population monitoring is required at this time. The Regional Board and CDFG however, reserve the right to further evaluate the significance of this issue. Should they determine at any time within the permit period that potentially significant adverse impacts to waterfowl could occur as a result of aquaculture operations, the Regional Board will require the dischargers to conduct a waterfowl population monitoring program. The general requirements for such a program would be developed by CDFG and Regional Board. Dischargers would then be required to submit a detailed monitoring program for approval to the Regional Board. Interested parties including Sequoia Audubon Society and the Monterey Bay National Marine Sanctuary would be contacted for comment on the proposal.

12. San Mateo County Harbor District has a legislative grant from the State of California which allows the harbor to lease areas consistent with requirements of commerce and navigation. The Coastal Act provides for the protection of commercial fishing and recreational boating and provides that existing boating harbor space shall not be reduced unless the demand for such facilities no longer exists. Therefore, the Order does not address the issue of harbor space because the Harbor District and California Coastal Commission are the agencies with regulatory jurisdiction in this matter.

APPLICABLE PLANS, POLICIES AND REGULATIONS

13. Pillar Point Harbor is as an enclosed bay, and therefore, water quality standards for the harbor are not covered by the California Ocean Plan. Water quality regulations governing enclosed bays are those which are stated in the Water Quality Control Plan for the San Francisco Basin (Basin Plan). The Basin Plan sets standards for "all surface waters within the region, except the Pacific Ocean."

14. The Board adopted a revised Basin Plan for the San Francisco Bay Basin on June 21, 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resources Control Board (State Board) and Office of Administrative Law on July 20 and November 13, respectively of 1995. A summary of the regulatory provisions is contained in Title 23 of the California Code of Regulations at section 3912. The Basin Plan identifies beneficial uses and water quality objectives for the waters of the State, including surface and ground waters, as well as effluent limitations and discharge prohibitions intended to protect beneficial uses.

BENEFICIAL USES

15. The beneficial uses of Pillar Point Harbor are:
    a. Ocean, Commercial and Sports Fishing
    b. Marine Habitat
    c. Fish Migration
    d. Navigation
    e. Preservation of Rare and Endangered Species
    f. Water Contact Recreation
    g. Non Contact Water Recreation
    h. Shellfish Harvesting
    i. Fish Spawning
    j. Wildlife Habitat

BASIS FOR REQUIREMENTS

16. The Basin Plan establishes narrative objectives for acute and chronic toxicity. In part, the Basin Plan states that "All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species..."

17. Receiving water limitations in this Order are based on the plans, policies, and water quality objectives and criteria of the Basin Plan, applicable Federal Regulations (40 CFR Part 122 through 131), and best professional judgment.

18. Based on review of applicable Federal regulations (40 CFR Part 122 through 131), we conclude that the proposed facilities are by definition aquaculture projects (40 CFR 122.25) which meet the stated criteria for issuance of NPDES permits (40 CFR 125.11).

CEQA AND PUBLIC NOTICE OF ACTION

19. The issuance of waste discharge requirements for this discharge is exempt from the provision of Chapter 3 (commencing with Section 21100 of Division 13) of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.

20. The Board has notified the discharger and interested agencies and persons of its intent to issue waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

21. The Board, in a public meeting, has heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED THAT Mr. Doug Hayes doing business as Pacific Offshore Farms, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Prohibitions

1. The maximum number of abalone grown by the discharger at the end of the permit period in June of 2003 shall not exceed 500,000.

2. Discharge of sabellid worms to the waters of the state is prohibited until California Department of Fish and Game has adopted policies and procedures, and/or regulations (which are now in development) pertaining to sabellid worm.

B. Receiving Water Limitations

1. The discharger shall maintain the following limits of water quality at all times:

   a. Dissolved oxygen: 5.0 mg/l minimum.

   b. The pH shall not be depressed below 6.5 or raised above 8.5.

   c. Controllable water quality factors shall not increase the total dissolved solids or salinity of waters of the State so as to adversely affect beneficial uses, particularly fish migration and estuarine habitat.

   d. Waters shall not contain substances in concentrations that result in the deposition of material in concentrations that cause nuisance or adversely affect beneficial uses.

2. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act, and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto the Board will revise and modify this Order in accordance with such standards.

C. Provisions

1. During the first year of operation, the maximum number of abalone grown shall not exceed 20 percent of 500,000, or 100,000. At the end of first year of operation, and prior to any increase in operation level, a technical report as described in provision 2 shall be submitted. The Executive Officer shall review and comment on this report within 60 days of delivery. After the Executive Officer finds this report acceptable, the number of abalone grown may be increased by 20 percent of 500,000 (100,000 abalone) during year two, such that the total number being grown equals no more than 200,000 abalone at the end of year two. At the end of the second year of operation, a technical report as described in provision 2 shall be submitted. After this report is found to be acceptable, the number of abalone grown may be increased by up to 20 percent of 500,000 per

year (100,000 per year) through the end of the permit period in May of 2003. As per requirement in previous years, a technical report shall be submitted each year to the Executive Officer as described in provision 2.

2. At the end of each year of operation, and prior to each incremental increase in abalone production, a technical report acceptable to the Executive Officer shall be submitted containing the following: 1) a summary of the past year's monitoring data with an evaluation of monitoring that documents all receiving water limitations are being met; 2) a summary of any problems encountered that may affect water quality and a description of how the problems will be solved; and 3) a proposal which specifies the increase in number of abalone to be grown in the coming year. Production shall not be increased until the Executive Officer accepts the proposal in the technical report. This annual report is due by January 15 of each year. Additions requirements and details are specified in Section IV.C. of the Self-Monitoring Program.

3. Water quality monitoring, sediment sampling, and benthic invertebrate population sampling will be required to evaluate: a) the significance of potential impacts; and b) how these may effect project size and operation requirements (see details in attached self-monitoring program).

4. The discharger shall comply with all items of the attached "Self-Monitoring Plan for Pacific Offshore Farms" dated June 17, 1998.

5. The discharger shall comply with all sections of this Order immediately upon adoption.

6. The discharger shall permit the Regional Board or its authorized representative, upon presentation of credentials:

   a. Entry on the premises on which wastes are located or in which records are kept.

   b. Access to copy any records required to be kept under the terms and conditions of this Order.

   c. Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this Order.

   d. Sampling of discharge or surface water covered by this Order.

7. If within six months of the adoption of this permit, CDFG has not adopted policies and procedures, and/or regulations regarding sabellid worm (which

are now in development), the discharger shall submit a technical report, acceptable to the Executive Officer, which describes how it will comply with Prohibition A.2. concerning sabellid worms.

8. Three months prior to the commencement of introduction of abalone into the waters of the state, the discharger shall submit a contingency plan, acceptable to the Executive Officer, which describes the measures it will take if and when dissolved oxygen of the harbor falls below 5 mg/l.

9. This Order expires on June 17, 2003. The discharger must file a Report of Waste Discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of the expiration date as application of issuance of new Waste Discharge Requirements.

10. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective ten (10) days after the date of its adoption provided the Regional Administrator, EPA, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the forgoing is a full, true and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 17, 1998.

Loretta K. Barsamian
Executive Officer

Attachments: Location Map, Self-Monitoring Program.

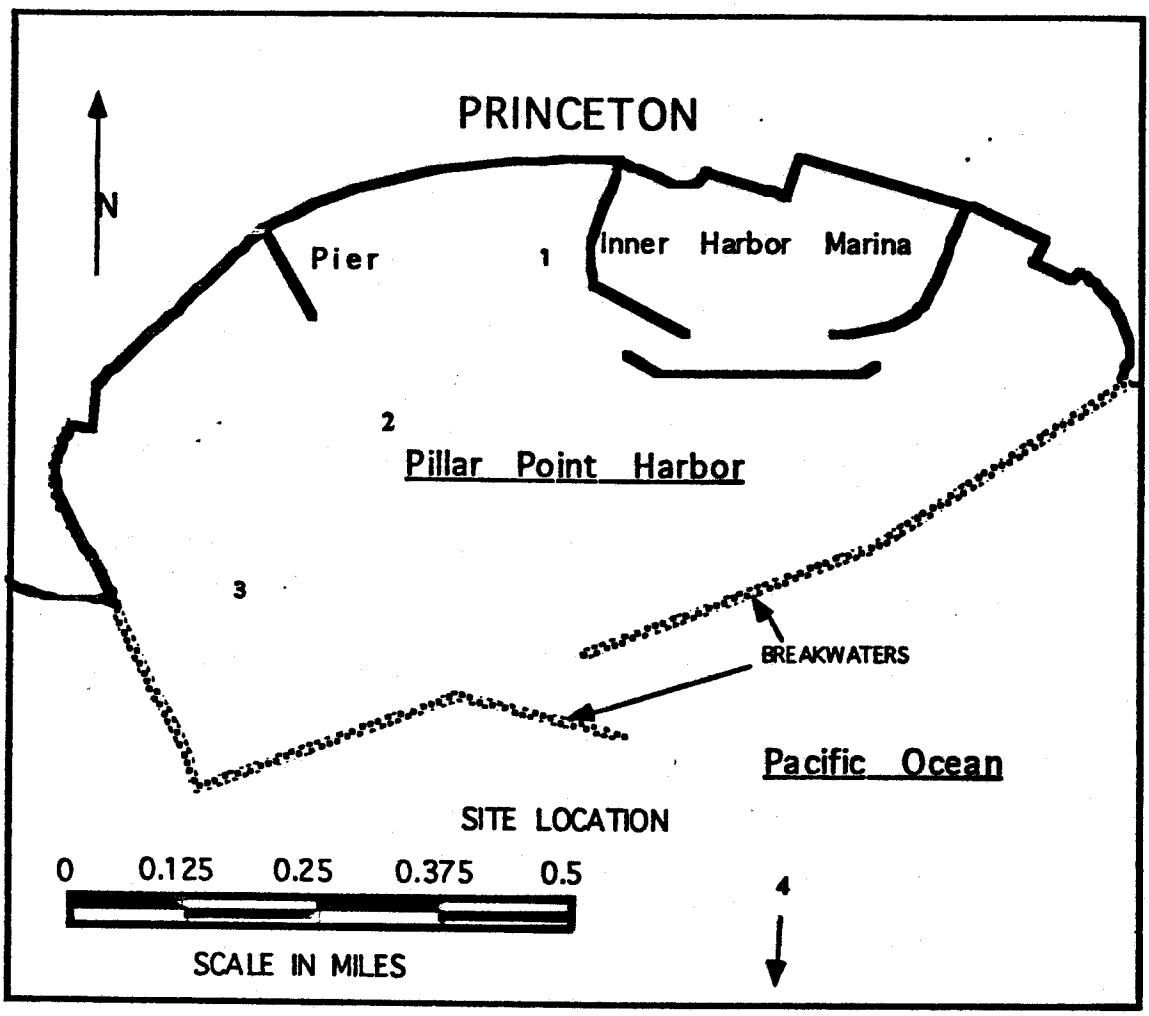

FIGURE 1. SITE MAP AND MONITORING STATION LOCATIONS

Source for Basemap: Princeton Abalone, Inc. (1997)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

MR. DOUG HAYES, dba
PACIFIC OFFSHORE FARMS

SAN MATEO COUNTY

NPDES NO. CA0036251

ORDER NO. 98-055

Adopted
June 17, 1998

CALIFORNIA REGIONAL WATER QUALITY CONTROL PLAN
SAN FRANCISCO REGION

SELF-MONITORING PROGRAM

FOR

Mr. Doug Hayes, dba Pacific Offshore Farms,
Aquaculture Operations in Pillar Point Harbor

I. GENERAL

A. Basis

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383 and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

B. Purpose

The principal purposes of a monitoring program by a waste discharger, also referred to as self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

C. Sampling and Methods

Sample collection, storage, and analyses shall be performed according to 40 CFR S136 or other methods approved and specified by the Executive Officer of this Regional Board. Any necessary laboratory analyses, shall be performed by a laboratory approved for these analyses by the State Department of Health Services (DOHS) or a laboratory approved by the Executive Officer. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements. All Quality Assurance/Quality Control measures and results shall be reported along with the data.

II. DEFINITION OF TERMS

instantaneous sample is defined as an individual sample collected at specified times for the parameter of interest.

continuous sample is defined as a measurement made by a recording gauge at a prescribed data collection interval.

Duly authorized representative is one whose:

a. Authorization is made in writing by a principal executive officer or ranking elected official;

b. Authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as general partner, sole proprietor, plant manager, superintendent, a position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company.

High Value is defined as the highest measurement obtained in the reporting period, as determined by a instantaneous sample.

Low Value is defined as the lowest measurement obtained in the reporting period, as determined by a instantaneous sample.

III. SPECIFICATIONS FOR SAMPLING AND ANALYSES

The discharger is required to perform sampling and analyses per the following conditions:

A. Receiving Waters:

1. Receiving water sampling shall be conducted at the following monitoring stations:

Station	Description
R1	SMCHD Fishing Pier.
R2	Half-way point between abalone facility and the SMCHD Fishing Pier
R3	Centered directly below abalone facility.
R4	Green Can located just outside harbor entrance.

Attached map (Figure 1) shows locations for monitoring stations.

2. The schedule for water quality sampling shall be as given in Table 1.

TABLE 1.
SCHEDULE FOR SAMPLING, AND MEASUREMENT
OF PHYSICAL AND CHEMICAL WATER QUALITY DATA

ABALONE STOCK TOTAL (number of animals in the water):	< 50,000	50,000 to < 200,000	200,000 to permit limit[2]
TYPE OF SAMPLE AND SAMPLING STATIONS	Sampling Frequency	Sampling Frequency	Sampling Frequency
Dissolved Oxygen (mg/l) and Water Temperature (^{O}C) at Stations R1 through R4	Baseline - completed; study conducted by SMCHD (1996) satisfies this requirement.	Weekly in all months and daily throughout two complete lunar cycles within the months of June-September. (per Section III.A.3 and III.A.4)	Weekly in all months and daily throughout one lunar cycle per season (spring, summer, fall, winter). (per Section III.A.3 and III.A.4)
Bottom Sediment (organic matter content) at Stations R2 and R3	Baseline - within six months of permitting, one sample shall be collected and analyzed (per Section III.A.5).	Once every twelve months (per Section III.A.5)	Once every six months (per Section III.A.5)
Benthic Infauna at Stations R2 and R3	Baseline - shall be sampled and analyzed within six months of permitting. (per Section III.B.).	Once every twelve months (per Section III.B.).	Once every twelve months (per Section III.B.).

3. Weekly monitoring of dissolved oxygen and water temperature: one sampling event per week. On the date of sampling, measurements will be made in the morning hours (± 4 hours of sunrise). No more than two hours of time shall elapse between the first and last measurements made at each of the prescribed sampling sites (R1-R4) in order for the measurements to be considered valid. Measurements at Station R4 are voluntary. At each sampling site, one measurement must be made in each of the following positions within the water column: a) within 2 feet of the surface; b) midway between the surface and bottom; and c) within 2 feet of the bottom.

4. Daily monitoring of dissolved oxygen and water temperature: one sampling event per day. All other specifications are as described immediately above for weekly monitoring.

[2] Pacific Offshore Farms is permitted to stock up to 500,000 abalone in the waters of Pillar Point harbor.

5. Bottom sediment samples: Baseline and all other samples shall be collected at stations R2 and R3. Bottom sediment shall be analyzed for organic matter content. Sampling frequency is as stated in Table 1.

B. Benthic Infauna Sampling

Baseline and annual sampling: CDFG will review the marine benthic invertebrate study conducted by ENTRIX (1991) to determine whether or not this and/or other data can be used to establish a partial and/or complete baseline assessment of benthic invertebrate communities in the harbor. CDFG will also develop requirements for the baseline and annual sampling program which will be presented to the Regional Board and the discharger. The discharger shall submit a technical report acceptable to the Executive Officer containing a proposal for benthic infauna sampling by October 16, 1998. The proposal shall be based upon the guidance to be provided by CDFG. This technical report shall also be sent to the agencies listed in Section IV.C. of the Self-Monitoring Plan. No abalone stock may be introduced into Pillar Point Harbor until the benthic infauna sampling program has been approved. The benthic infauna baseline assessment must be completed by June 17, 1999. Stock totals in Pillar Point harbor shall not exceed 50,000 abalone prior to completion of the benthic infauna baseline assessment.

C. Standard observations

The following observations shall be recorded once a week:

1. Receiving Water:

a. Floating and suspended materials of waste origin (to include oil, grease, algae, and other macroscopic particulate matter: presence or absence, source, and size of affected area.

b. Discoloration and turbidity: description of color, source, and size of affected area.

c. Odor: presence or absence, characterization, source, distance of travel, and wind direction.

d. Hydrographic condition:

1. Time and height of corrected high and low tides (corrected to nearest NOAA location for the sampling date and time of sample and collection).

2. Depth of water columns and sampling depths.

E. Records to be Maintained

1. Written reports, strip charts, calibration and maintenance records, and other records shall be maintained by the discharger and accessible (at the San Mateo County Harbor District), and retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board or Regional Administrator of the USEPA, Region IX. Such records shall show the following for each sample:

   a. Identity of sampling and observation stations by number.

   b. Date and time of sampling and/or observations.

   e. Date and time that analyses are started and completed, and name of personnel performing the analyses.

   f. Complete procedure used, including method of preserving sample and identity and volumes of reagents used. A reference to specific section of Standard Methods is satisfactory.

   g. Calculations of results.

   h. Results of analyses and/or observations.

2. A tabulation shall be maintained showing the following aquaculture operations data: total number of animals in production at end of each month, including percentage by size-class.

IV. REPORTS TO BE FILED WITH THE REGIONAL BOARD

A. Report of Permit Violations

In the event that the permit is violated, the discharger shall notify the Regional Board by telephone within 24 hours and shall notify the Regional Board in writing within five (5) working days. A written report shall include time and date of incident, and estimated duration of violation. The report shall include a detailed discussion of the reasons for the non-compliance and what steps were or will be taken to correct the failure and prevent it from occurring again.

B. Spill Reports

A report shall be made of any spill of hazardous material or of any detection of sabellid worm infestation. Spills shall be reported to the Regional Board, at (510) 286-1255 on weekdays during office hours from 8 AM to 5 PM, and to the Office of Emergency Services at (800) 852-7550 during non office hours, and to the U.S. Coast Guard at (415)

437-3091 (if the spill is into navigable waters) by telephone immediately after occurrence. Sabellid worm infestations shall be reported immediately to CDFG at (805) 772-1714 or at (707) 875-2066 and the Regional Board at (510) 286-1255. A written report shall be filed with the Regional Board within five (5) working days and shall contain the following information as applicable:

1. nature of waste, pollutant, or pest infestation;
2. quantity involved;
3. duration of incident;
4. cause of spill;
5. SPCC Spill Prevention and Containment Plan in effect, if any;
6. estimated size of affected area;
7. nature of effects (i.e., fish kill, discoloration of receiving water, etc.);
8. corrective measures that have been taken or planned, and a schedule of these activities; and
9. persons notified.

C. Self-Monitoring Reports

Self-monitoring reports shall be submitted quarterly by April 15, July 15, October 15, and January 15. The January 15 monitoring quarterly report shall also contain an annual report with tabular summaries of the previous 12 months of monitoring data. Reports shall be submitted to each of the following agencies:

California Department of Fish and Game
Environmental Services Division
Attention: Becky Ota
411 Burgess Drive
Menlo Park, CA 94025

National Oceanic & Atmospheric Administration
Monterey Bay National Marine Sanctuary
Attention: Patrick Cotter
299 Foam Street, Suite D
Monterey, CA 93940

Regional Water Quality Control Board
Attention: South Bay Watershed Division
2101 Webster Street, Suite 500
Oakland, CA 94612

San Mateo County Harbor District
Attention: Peter Grenell
One Johnson Pier
El Granada, CA 94018

California Coastal Commission
Central Coast District
Attention: Joy Chase and John Dixon
725 Front Street # 300
Santa Cruz, CA 95060

The reports shall be comprised of the following:

1. Letter of Transmittal which includes identification of changes to the project design and any water quality violations or spills that have occurred since the last reporting period.

2. A monitoring report which details: the magnitude, frequency, and dates of all violations, the cause(s) of the violations, corrective actions taken or planned, and the schedule for completion of corrective actions.

3. Monitoring reports and the letter transmitting reports shall be signed by a principal executive officer or ranking elected official of the discharger, or by a duly authorized representative of that person.

4. The letter shall contain the following certification:

"I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

5. Results of Analyses and Observations

   a. Instantaneous dissolved oxygen and water temperature samples: summary tabulation of low, high, and average values for data collected within the reporting period shall be reported for each constituent, by station. Date(s) and time(s) of low and high values at each station shall also be reported. All data collected within the reporting period shall also be provided on computer diskette in spreadsheet tables organized by station and time sequentially.

   b. Benthic Infauna and bottom sediment sampling: all data collected within the reporting period shall be submitted.

I, Loretta K. Barsamian, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Board Order No. 98-055

2. Has been ordered by the Board on June 17, 1998.

3. May be revised by the Executive Officer pursuant to federal regulations (40CFR122.36); other revisions may be order by the Board.

Loretta K. Barsamian

LORETTA K. BARSAMIAN
Executive Officer

Attachments:
Sampling Location Map